TIsHUG NEWS DIGEST

Focusing on the TI99/4A Home Computer

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IBM

TIsHUG Sydney Meeting

The October Meeting will start at 2.0 pm on the 4th October 1997 Computer repairs & upgrades from 10.30 AM. at the Ryde East Primary School, Twin Road Nth. Ryde.

screen (4), they are "invisible" but all there; being on top of the crocuses, they hide them until put in motion during the playing of the music; a velocity of one, the lowest possible, seemed most appropriate for nature's rhythm. I put the CALL MOTIONs following the "mute" notes to simplify, but you are welcome to change their location. Now, you may ask, how can a single character sprite hide flowers made of two characters vertically placed? Remember, in line 120, we magnify all the sprites to "2", which make them 4x4, so our flowers are conveniently covered.

At the end of this musical masterpiece, you are asked if you want to play it again; note that even if we display a line without a SIZE statement, the letters in the title are not erased: this is because the sprites are on top of the text screen, and are thus not affected by this statement. The three "invisible" sprites are deleted, so that they don't come down far enough to "hide" the displayed text and our full-grown flowers while Tex waits for you to press a key.

SPRING BONUS!

Did you know that you can ACCEPT strings that are longer than the screen width (28 char.)??? Easy, and they can be as long as 255 characters, while INPUT/LINPUT will take only 138 to 140. Only problem: it is always on line 24, but you MUST NOT specify it. However, you can qualify it as usual with BEEP, VALIDATE, etc. Try the following, and enter a text until Tex tells you to stop:

```
100 PRINT "INPUT:" :: INPUT A$ :: PRINT LEN(A$)
110 PRINT
120 PRINT "ACCEPT:" :: ACCEPT B$ :: PRINT LEN(B$)
```

Thanks to Bryant Krause for sending these articles to TIsHUG

END OF ARTICLE

FAST EXTENDED BASIC! pgm: QUICKBILL

By Lucie Dorais

NOTE: the program on the disk is an UPDATED version; changes were made to add a TAX function, lines 185, 330-340, 415, 460-480, and more IMAGE statements. These docs have been updated accordingly.

PRINT and DISPLAY are two of the most often used statements in XB, and their syntax is easily understood. But wouldn't it be nice to be able to tell the computer exactly how to place the variables on the line, without having to fiddle with the concatenation of strings, or trailing spaces for numeric variables? How about aligning a whole column of text and a whole column of strings?

Like bigger Basics (Microsoft's and GW-BASIC for example), TI's Extended Basic uses a statement called PRINT USING (plus of course DISPLAY USING). In the GW-BASIC manual, there are three pages of different ways to format your line, and you must tell the computer if your value is a string or a number; if a number, you must tell if it is positive or negative when you format the string! Quite complicated... The wise XB guru has provided us with only one way to do it: define the line by using any constant character, and the string or numeric values by replacing them with the maximum number of "#"s that you think you will need. Any character which is not an octothorpe (a.k.a. "#"), including the space and the comma, tells Tex to separate the values. And no need to specify if the value is a string or not, Tex will know and react accordingly; it will even learn and display the proper sign of your numeric value, therefore you can use the same format for about anything. Better, the period will be used for decimals if the value is numeric, or will be "forgotten" if the value is a string!

The PRINT USING statement normally expects the formatting string to follow (in ""s), like in PRINT USING "####":A$. But if you want to use the same format many times, you can use a very unito define any formatting string on a separate line, without quotes. Great idea isn't it? The only drawback is that if your value is bigger (i.e. has more characters) than the format defined, you get asterisks. Some problem, but not bad if you consider that if the same thing happens to you in GW-BASIC, subsequent formatting can be destroyed.

This short program is a quick review of some of the possibilities; the results at the right are printed exactly as they would appear on the screen:

```
100 IMAGE ###/###.##                    | R
110 PRINT USING 100:100,3               | E  100/ 3.00
120 PRINT USING 100:5.23,-76.45         | S   5/-76.45
130 PRINT USING 100:2000,9999           | U  ***/******
140 PRINT USING 100:"TOT",258.50        | L  TOT/258.50
150 PRINT USING 100:"ME","THERE"        | T  ME /THERE
160 PRINT USING 100:"HOUSE","MAILMAN"   | S  ***/******
```

You will quickly note that the slash (a constant character; any other would have the same effect) separates the two values; numeric values are printed with decimals if there is a period, but only the integer part is printed if there is none. The values which are too big are replaced by asterisks. Another feature, very useful but hard to spot here: the string values are left-

FAST EXTENDED BASIC! pgm: SPRINGSONG

By Lucie Dorais

I wished to do a little column on music, but was unable to find the score for Vivaldi's "Spring"; anyway, Tex is not very good in imitating violins. So I looked into my music books and found a little piece called "Spring Song", by Schulz (I don't know more about him, sorry).

Extended Basic does not add anything to the CALL SOUND statement of BASIC, except that you could use multiple statements lines. I decided not to, because single CALLS are easier to read. And to type??? Well, what about using the REDO function? Just type the first CALL SOUND, line 270, and REDO it as you need; but don't forget to change the line number! (In the program listing, I wrote all the CALL SOUNDS as CS: you will need to type the full statement, I did that only for page setting purposes). A tip: lines 610-710 are an exact duplicate of lines 490-590, just change the line numbers when you redo them. And if you have Triton's SXB, well, just do "COPY 490-590,610,10", presto, all the lines are copied in one statement (10 is for the increment).

The nice title routine comes from our friend David Fink, who used it to fill the page of his renewal letter; thank you Dave! It is in lines 120 to 170, and came as a two-line (multiple statements) routine. You can use it with any program, but the title has to be 12 characters or less to work. To get all the letters in the same color, just give a single color value to the sprites instead of "I+5" in line 160.

I decided to put most of the values into variables at the beginning of the program (lines 190-200 are for the notes, line 210 for duration and volume). Each time Tex encounters a numeric value, it first puts it into a memory address before using it; using variables does it once only, and the program runs a bit faster and smoother.

The names for the notes variables are suggested by Raymoniano: C to B for middle range, LC to LB and LLA-LLB for lower ranges; upper ranges are of course HC to HB, then HHC to...whatever you want. The "S", as in "LFS", means the note is a sharp; a flat would be "F", like in "BF", but we don't use any here. The variable "DUM" stands for DUMMY in line 890 (see below). If you look at the listing, you will find some note frequencies as "40000", which I did not put into variables for aesthetic reasons (to better visualize the score): they are "mute" notes (inaudible), and serve to stop the previous CALL SOUND; they correspond to the ends of the "slurs" in the musical score, and perform a short pause in the music.

Putting the duration of the quarter note into a variable "T" makes it much easier to control the tempo; the eighth note is T/2, the sixteenth T/4. At the end of the piece, the score had some triplets (three notes in the same beat as the basic quarter note), so we have T/3. To make the tempo slower, change T to a higher value, and do the opposite to make it faster. I think 600 is very appropriate to lift our spirits out of the winter blues. TD is for the dotted eighths, equivalent to three sixteenth notes; I made it into a variable because of the long calculation, for fear of slowing down the music.

I did not play too much with the volumes: all the Treble clef (G), i.e. what is played with the right hand, is loud (V1=1), while the Bass (F) clef, played with the left hand, is a bit softer (V2=5). You can of course play with those values to add some "feeling" into Tex's playing.

Before leaving the score itself, a note on line 890: what does it do??? well, it plays a note which has a frequency lower than 110; in this case, the G just below it, with a frequency of 98. I got the tip (and the values) from a little tutorial program by Tom Moran, "Teach Music"; I quote the appropriate screen from this program: "These low notes are created by using noise # -4 in combination with specific frequencies. Here is the program list:

```
100 DATA 1475,1293,1227,1105,990,957,840,735
110 FOR I=1 TO 8 :: READ T :: CALL SOUND(1000,T,30,
  T,30,T,30,T,30,-4,1) :: NEXT I "
```

Now, don't ask me what these values mean! The program plays down the scale below the lowest A (110). I was able to change the first value with the note and volume I needed in Treble clef, with no audible effect.

You should know about line 220. Lines 230 to 260 start some very crude animation: three crocuses grow slowly. In line 230, we define three characters (in three sets, to get three colors) as the same flower; char. 120 is the green stem. The three flowers are then "displayed" in line 260, a much faster way than with CALL HCHARs.

To simulate the growing, we use a "mask" sprite, character 128, defined as a solid block. We need three sprites, numbered from 13 to 15 because the title use a maximum of 12 sprites. Being the same color as the

justified, the numeric values are right-justified. Great to print lists of words and numbers! How about QUICKBILL, a short program to print a bill?

This crude program (but good things can always be improved) is divided in three modules. The Input Data part is very simple; I decided to use the INPUT and LINPUT (line input, which allows the comma) statements for simplicity. The data entry for the address of the receiver is a straightforward string input, with no error catching; the TAX input is also a simple number variable input (enter "0" if you don't need to calculate the tax). The bill part is a bit more sophisticated, because it is very easy to mix the data, and enter a number when asked for a string. If you enter a number for "Item Name", the program checks if its ASCII value (that of the first character of the string) is lower than 65, i.e. "A". The error checking for the INPUT statements in line 230, which expects numeric values, is controlled by the ON WARNING NEXT in line 110. Without it, you program would crash with a not so nice "* WARNING INPUT ERROR IN 230"... With it, it simply re-executes the statement and will keep doint it until you understand.

Line 240 calculates the total cost for each item in the bill, and tabulates the running total. Please note that no tax is added here: this will be done only later, on the total. You can enter a maximum of 15 items in the bill; if you have less than that, simply press enter at the next "Item Name" prompt.

The second part of the program displays our bill on the screen, by using the DISPLAY AT USING statement. Please note carefully the syntax of each possibility, both for DISPLAY and PRINT, as this is the most complicated part of the statement, and is different when you print to an output device other than the screen. The XB manual is incomplete in that area, and I found the correct syntax after a lot of trial and error.

The IMAGES we will use are conveniently placed at the beginning of each section of the program, but they could be anywhere, since they are referenced by their line number. For the screen output, we use two images: line 270 to display the client's name and address, plus a vertical bar (a constant character), and line 280 to design the bill proper.

Line 290 uses the image in line 270. Since all the octothorpes are continuous, that means we can use only one variable. True? No... as I discovered when I wrote the program, you can re-use the same image for any number of variables; each use of the image will take a new line: easier formatting when you need to mix values and constant characters! When, on the other hand, we format our display to print more than one variable in the same formatted line, everything will fit exactly where you want it: look at line 320, which prints three variables using the image in line 280, and also provides for the dollar sign. In all cases where you format one than more values, they MUST follow the format string or reference to an image, and they MUST be separated by commas.

Since the format in lines 335 and 340 is very short, I decided not to use an external image; in that case, the formatting string must be between quotation marks, but again it can include any constant character, here "TX" and the dollar sign respectively. Please note the CALL KEY in line 360: defining the keyboard as "3" allows us to enter either upper or lower case, Tex will always read it as upper case!

Our bill looks fine on the screen, but how do we send it to our client? Well, we print it, and again the IMAGE statement will help us to easily format a nice and professional-looking document. Since the printer is wider than the screen, we can include more values in our bill proper, and some formats can be longer.

The Image in line 390 expects four values (see line 450) and also provides the dollar signs plus some vertical bars. As for the longer values, try to bill your client for a few ANTIESTABLISHMENTS, the screen will show asterisks, but the printed bill will be OK; but don't sell him any ARCHEOLOGICAL ARTIFACTS: he will see only stars, and will rightly refuse to pay for them!

Line 275 Image is used to print the total in line 470; instead of including a long line of spaces in the IMAGE statement (in that case, we would need quotations marks to keep those spaces in), we print them in the previous statement, followed by a semi-colon. Why use an image for such a simple case? Well, you guessed it: whatever the value of the TOT variable, it will always be placed at the same spot on the page, and always aligned with the list of prices in the main portion of the bill. The same goes of course for the tax; if you told Tex "no tax", i.e. TAX=0, it will skip line 470 and print only the total.

I hope that you followed me through my picture book, and that you will use the very useful IMAGE statement, or at least DISPLAY USING.

Thanks to Bryant Krause for sending these articles to TIsHUG

END OF ARTICLE

HORIZON RAM DISK QUESTION

from the net

With thanks to DAVE CLARK

From jnsimmons1@juno.comSun Dec 22 17:27:23 1996
Date: Sat, 21 Dec 1996 12:40:03 EST
From: Joe N Simmons <jnsimmons1@juno.com>
Reply to: ti99@TheRiver.com
To: ti99@TheRiver.com
Subject: TI99: A horizon ram disk question from E. M. Smith
I received the following in a letter from one of our club members. Please offer solutions or recommend procedures.

Joe, this past week I have had to sweep back the cobwebs of my mind to recall several tid bits of past knowledge in an effort to help Bob Buehler with some computer related problems. It seems that in the process of solving some problems, other problems were created. However, there is one problems that I was unable to resolve. In Bob's system is a Horizon Ramdisk which like mine only with more memory. Like mine Bob uses DSK7. to store his Newsletter program files. When Bob was unable to do a "Show Directory" of any ramdisk while in command mode of the Newsletter Editor I was certain the editor file was contaminated.

Knowing that this was no problem on my system, I proceeded to copy the newsletter files from my system to his system. Problem still unresolved so surely his version of the ROS (ram operating system) must be contaminated. Knowing also that the MENU file was involved in the selection process I first replaced the MENU File with his backup copy to no avail. Now I go for Bob's backup copy of his ROS. Unfortunately, his back up copy was not updated when he sometime modified the operating ROS. Geeze Whizz, now things are really screwed up.

Only thing left to do is rebuild a ROS that was compatible with his configuration. Time intensive to say the least and with that done we were still unable to do a SD of ramdisks from the command line of the Newsletter Editor. A call to Art Gibson, the Author of the Newsletter Editor program, was also fruitless. Does any one in the TI World know how to resolve this problem? Will be glad to hear from you!

E. M. Smith
3506 Garden Drive
Knoxville, Tennessee 37918

C -.-. Q —.- -.-. C —.- Q

If you will reply on this server to me, I will forward you recommendations to E. M.

If my memory is correct, they (Bob and E.M.) have 3000 series HRD's.

The reason Bud has my 4000 ramdisk right now is because it gave me erratic results and told me the individual disk drives on the ram had enormous sectors when it actually did not.
joe

From cgood@bright.netSun Dec 22 17:27:32 1996
Date: Sat, 21 Dec 96 12:59:15 PST
From: cgood@bright.net
Reply to: ti99@TheRiver.com
To: TI99/4A Listserver <ti99@TheRiver.com>
Subject: TI99: Horizon ramdisk recovery
Here is the procedure for recovering a Horizon Ramdisk that is acting funny. If some of the software on the ramdisk doesn't act right, this procedure will often cure the problem.

-Load the Horizon configure program.
-Select L to load in a fresh ROS. Say N when asked if you want to keep current congiguration.
-Load in the ORIGINAL ROS on the ROS disk by spedifying the file name DSK1.ROS
-Again select L to load a ROS and say N when asked if you want to keep the current configuration.
-Now load your own ROS by specifying the file name DSK1.YOURROS. This is the ros you saved after you got your horizon all set up the way you wanted it.

Usually you will find the software on your Horizon all still there and
working.
From: Charles W. Good
E-mail: cgood@.bright.net (Charles W. Good)

From jnsimmons1@juno.comSun Dec 22 17:27:38 1996
Date: Sat, 21 Dec 1996 14:12:47 EST
From: Joe N Simmons <jnsimmons1@juno.com>
Reply to: ti99@TheRiver.com
To: ti99@TheRiver.com
Subject: TI99: Horizon ramdisk recovery
I will pass this along to E.M. I would guess that he has been trying not to loose the existing data. In my own experience, I found that I could copy those files which I remember their names to another disk with out any problems even though I could not get a disk directory to list them.

joe

From aa695@acorn.netSun Dec 22 17:27:52 1996
Date: Sat, 21 Dec 96 16:02:36 EST
From: Robert Dresser <aa695@acorn.net>
Reply to: ti99@TheRiver.com
To: ti99@TheRiver.com
Cc: Robert Dresser <aa695@acorn.net>
Subject: TI99: CorComp

ûCould use some help!!!û
ûI am using a CorComp Memory Plus
V 3.1 512Kûû

Suddenly after two years the memory is being corrupted when I turn the PE Box off. I am still following û the usual instructions to shut downû the computer. Any ideas?
Bob Dresserûû

DESK TOP PUBLISHER REVIEWED.

Desk Top Publisher V1.0
By Ron Prewitt

DESK TOP PUBLISHER is a cartridge program produced by DataBioTics that allows you to create a graphic picture and then include the picture in your text. The text can be printed in one to three columns with an EPSON compatible printer.

PERFORMANCE:
The documentation recommends that the console be turned off when inserting the cartridge module. The title of the module will appear on the master selection list as "2" on the TI or Myarc and "3" on CORCOMP controller card. The documentation doesn't mention that you must use the space bar to get to the secondary selection screen with the CORCOMP otherwise the module will not function.
The program consists of three major sections that are selected from the main menu. These are "1" PICTURE MAKER, "2" WORD MAKER, and "3" PRINT PAGE.

The PICTURE MAKER is a graphics or drawing program that has many of the drawing functions of other graphic programs like TI-ARTIST, GRAPHX etc..The drawing modes are represented by a single key input. The drawing modes are Draw, Point, Frame, Box, Circle, Disc, Fill, Line, Connect Line, Rays Horizontal. The crosshair-shaped cursor can be moved about with either the joy stick or the FCTN "arrow" keys. The mode is activated by either the ENTER key or joystick fire button. There is a text mode that lets you type in the drawing area. You can select different size fonts with the FCTN 1 thru to 0 keys. The other functions are CLEAR to clear the work area, Save Picture to disk or casssette and Load Picture from disk or cassette. There is no mention of being able to use pictures created by any of the other drawing programs.
WORD MAKER is the text input program. You will first be asked to choose 1, 2 or 3 columns for inputting your text. Choosing 1, 2 or 3 columns will allow input of 78, 39 or 26 characters per line respectively. Making this selection will then take you to the text editor screen. The first task is to position the picture that was created or loaded from the PICTURE MAKER. Using the FCTN "arrow" keys or the joystick will position the picture anywhere on the page. To set the picture position, use ENTER or the joystick fire button. This will make the text editor ready to accept your input. The editor will only display 5 lines of text on the upper part of the screen and a maximum of 26 characters per line at one time. The lines can be scrolled up or down one line at a time with the FCTN "arrow" keys or 5 lines at a time with the FCTN 4 or 6 keys. The screen can be scrolled horizontally to view the entire line. The very top line of the screen shows the location of the cursor by column. row and the position within the line.
The botton of the screen displays a graphic representation of the entire page showing the position of the cursor and the picture. The screen also has framed areas that show several status conditions.
The editor functions are Delete Character, Insert Character, Delete Line and Insert Line. There are no Move, Copy, Replace String or Reformat functions.

Other utility commands are Roll-up, Roll-Down, Page-Right to scroll to the right, Word-Wrap toggle. Previous Menu, Save Text, Load Text, Place Picture and Select Text Style. The last four functions can be selected from either assigned function keys or the Editor Menu.
The saved text should be re-loaded in the same 1,2, or 3 column mode it was originally created and saved as Loading text that was saved as 1 column when you are in 3 column mode will truncate the text beyond position 26.
The Text-Style function allows the selection of several type styles. The type style chosen will affect the entire line.
There is no capability to limit the type style to a word or several words. The type styles available are Normal, Italics, Bold, Emphasized and Underline. More than one type style can be selected for a line in combination; an exmple is Bold and Emphasized.
The text buffer will only hold one page regardless of

column format. If you need additional pages for your text input, they must be created and saved as separate files.
The PRINT PAGE selection is pretty straight forward. It allows input of your printer device (the default is "PIO.CR") and whether to include the picture in the printed output.

Ease Of Use!

The program is fairly easy to use. Most everything is menu driven with easy to follow prompts.
One thing that would make the program a lot easier to use is being able to reformat the text although lines can be inserted, you end up having to retype a lot of text to eliminate having a real short line.
Another inconvenience is losing the special type styles you have set when the text is saved and then loadedd back in from disk. They are not lost when saved and loaded back in from cassette.
Another feature that would have made it easier is Right-Justify to eleminate the ragged edge on the Right edge of the text. This can be done manually by turning the Word-Wrap mode off and inserting additional blank spaces between words. It also would have helped, if the program would have automatically caused the text to bypass the Picture area. Typing text in the Picture area will overlay the text on the Picture when printed. There is an on-screen status box that indicates when your text is in the Picture area but it is still easy to end up with you busily typing in your text. You also have to remember that if you insert lines the type styles you have set will be off by the number of lines inserted. The PICTURE MAKER would have been more functional if it had the capability to work with pixels in a zoom or magnify mode. Being able to use pictures from other graphic programs would have been helpful also.

Documentation!

The documentation consists of a 7 page booklet including the Contents and In Case of Difficulty pages.
There was also an addendum insert of corrections to the booklet. This still only provided "bare bones" information. There was no explanation of the Status Boxes or that some of the type styles would be used together on the same line. These are just a couple of examples of information that could have been provided.
CE
Value!
The value is greater for those with an expanded system. It is a minimal text processor that allows you to prepare your text in 1, 2, or 3 columns. Although the ads show a page in a printer of almost a full page of graphics, the Picture area is actually only about 7 rows by 27 columns of text. There is only the capability to use one picture per page. Note: This article was prepared using DESK TOP PUBLISHER.

From Tacoma Informer June/July 1988. Retyped for TEXPAC BBS by John Ryan of TIsHUG.

PUZZLE

The puzzle below is based around the subject of the "Zodiac"

W D L C A I F Q W C K T B M S
R A M L S Y R E H C R A E U J
I E T A U R U S L D L W I F U
V R C E I B A R C A O R E K G
V J A N R N R R N T A G N G P
P X H O A B I C L U R E T X U
E X S F T C E M Q I Q A V F N
S J A U T K S A E B O P Z O P
U K O X I D V I R G I N I I M
G G O S G P I S C E S P G L B
X A A C A P R I C O R N G R Z
Y K B I S Z G O G O S A I G Z
O X C K F Z O D C X R L J W G
F L F I S H E S J S C E Y G T
O C Z T C J L A U T W N S R N

In the puzzle above there 23 words, which are listed below, they could be backwards forwards or even vertical see if you can find them

Good luck!

Aquarius
Archer
Aries
Balance
Bull
Cancer
Capricorn
Crab
Fishes
Gemini
Goat
Leo
Lion
Pisces
Ram
Sagittarius
Scorpion
Scorpius
Taurus
Twins
Virgin
Virgo
Water Bearer

DOWNLOADING FROM THE INTERNET

Re typed for TIsHUG by Loren West

INTRODUCTION

So, you're ready to download some of the thousands of game demos and guides, software patches and drivers, sound clips, and other cool stuff available on the Internet, but you're not sure how to get started? No problem. You've come to the right place. Reading these instructions will simplify the download and installation process, and help you to get the most out of your Web surfing.

Before you begin

Seeing It All

In this section we'll discuss specific file types and extensions, such as ".EXE" and ".ZIP". But before we get to the nitty gritty of file types and extensions, it's important to make sure you are seeing the files on your computer - including these two types - the same way we're seeing them on ours. There is a chance, however, that your Windows 95 preferences are set up to hide file extensions.

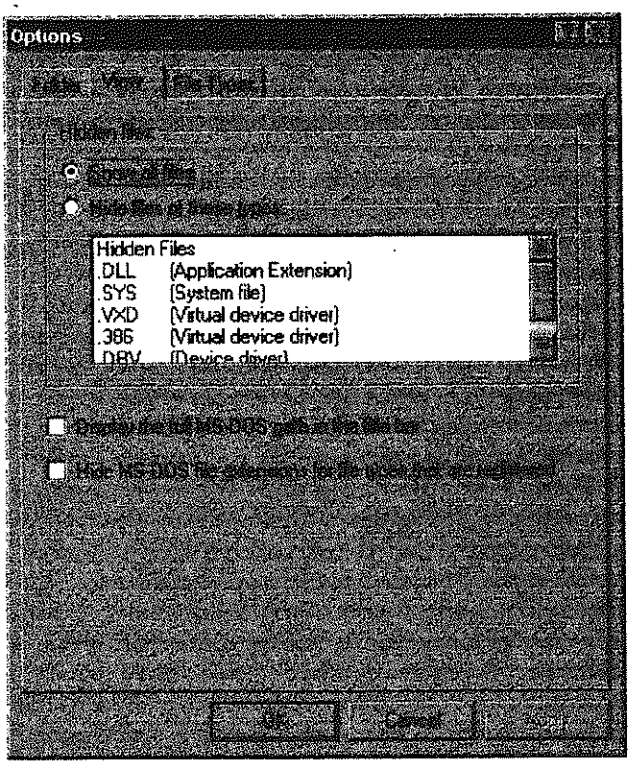
Microsoft's reasoning for hiding file extensions by default is that Windows 95's point-and-click interface makes worrying about these DOS carryovers a thing of the past. Unfortunately, this isn't true when it comes to downloading files and putting them to use. So for our purposes, you'll need to see all of the file types and extensions on your computer. To do so, follow these steps:

1. Double-click My Computer on the Desktop to open the My Computer window.

2. Click the View menu, then choose Options.

3. Click the View Tab to display Windows 95's file extensions view options.

4. Check or uncheck the appropriate buttons so that your View options look like ours, below (choose "Show all files" if it isn't already chosen, and uncheck "Hide MS-DOS file extensions for file types that are registered").



5. Click OK, and close any open Windows. That's it. Now any files that were previously hidden from your view will appear in folders when you open them with My Computer or Explorer.

File type

A File for Every Occasion

In a perfect online universe, we'd all be able to download multiple-megabyte files in a matter of seconds. On today's Net, however, file downloads, particularly for modem users, can take an overly long time, which is why most Net sites try to shorten transfer times by compressing downloadable files.

How can you tell if a file is compressed? Check its three-digit extension. If a file's name ends with .ZIP, that means it's been squeezed by PKZIP, the world's most popular compression utility.

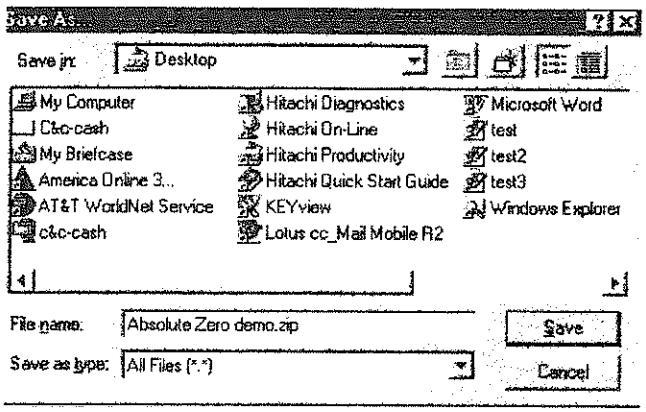
You'll find other file extensions too. File names that end with .EXE are either executables (program files) or self-extracting archives (more on these later). You'll also find .AU and .WAV files, which typically are short sound clips, and .AVI and .MOV files, which are movie clips, usually identified as "trailers" or "non-interactive demos."

Naming files

A Name to Remember

When you find a file you'd like to download, simply follow any onscreen instructions. These will normally be as simple as clicking its name. Your Web browser will present a dialog box with the file name, giving you the opportunity to rename the file if you like. If you choose to do so, be sure to use an easily identifiable word or phrase that will help you find the file at a later date.

If you're using Windows 95, for instance, and you're downloading the Absolute Zero demo, it's better to name the file "Absolute Zero demo.zip" rather than "absodem.zip".



Whatever you name the file, be sure to always leave the original file's extension intact, be it .zip, .exe, or .wav.

If you're still using Windows 3.x, you're stuck with that platform's cryptic eight-dot-three file naming scheme. Bottom line: You're stuck with the file's confusing name like "absodem.zip" or whatever. It's a good idea to write down the file's name - and what it stands for - so that you'll never lose track of a download stuck with a name like "09ext&.zip".

Saving files

Saving Your Downloads

Most (if not all) Web browsers will suggest a folder or directory where you should store the downloaded file. We recommend that you create a file called 'Downloads' and save any files to there. Saving files to one place means that when it comes time to clean up your PC, you can simply delete the entire 'Downloads' file to clean out all your old .ZIP files in one stroke. If you then simply recreate the 'Downloads' file, you'll be ready for more down loading.

Windows 95 users can save a file right on the Windows Desktop - the main interface where you'll see familiar icons such as "My Computer," and "Recycle Bin." When you save a file to the Desktop, Windows 95 automatically creates an icon for the file.
It's a good idea to then put each downloaded file into its own folder on your desktop, so that when you expand them, all of their associated files will be grouped together (as described in the next section).

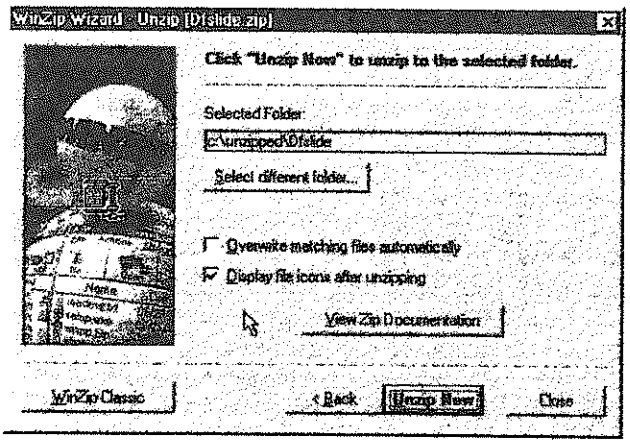
Decompression

Expanding Files with Winzip

Once you've downloaded a file to your hard disk, you're ready to do something with it. If the file has a .ZIP extension, you'll need to extract its contents. (A .ZIP file might contain a single file or a group of files.) While a variety of freeware and shareware programs perform this feat, a valuable one for new users to work with is Winzip, a Windows utility that you can download from the Web (there's a version here on this CD).

Why Winzip? Because it's so simple to use, yet still gives you decent control over what your PC is doing. Once you've downloaded Winzip's set-up file, double-click it to launch the installation program. More good news: Winzip installs quickly, and automatically configures itself to work with your system.

Now you're ready to decompress .ZIP files. Simply double-click the .ZIP file's icon, or, if you prefer, you can double-click the file's name in Windows Explorer or File Manager. Either way, Winzip launches automatically and "unzips" the file, placing the expanded file or files in a new folder.



WinZip also works with a variety of other compressed and encoded formats, including .TAR, .gzip, and .UUE. WinZip is available for Windows 95 and Windows 3.1.

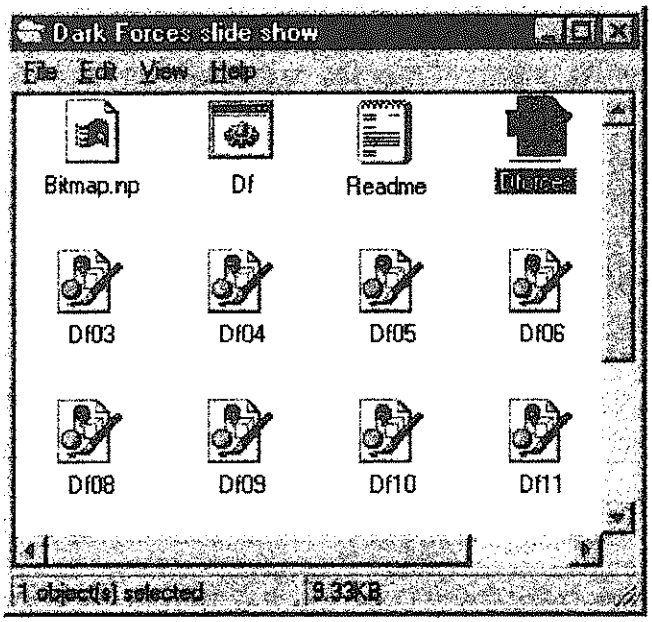
Self-Extracting Files

Not all compressed files require Winzip or a similar utility to extract the file's contents. For instance, many game demos have an .EXE extension instead of .ZIP. However, before you go and double-click a freshly downloaded .EXE file, we'd like to offer a bit of advice that will ensure that the file you are about to work with expands correctly.

Note: In some cases, an .EXE file is actually a self-contained installation program rather than a collection of files. If the previous step causes your .EXE file to run an installation program, then simply follow the prompts to install the demo or files and skip the next step.

Working with Expanded Files

At this point you should have downloaded and extracted the file, which means, in most cases, you're almost in the clear. The next step is to double-click the folder that your extraction utility has just created. Inside are several files - and if you are brand new to this you probably don't have a clue which does what.



A good place to start is by reading the README file, if one exists. README files often explain how to set up or use whatever it is you downloaded, be it run a playable game demo, install a software patch or driver that updates a current version of a game you already have, or view sneak preview screen shots of an upcoming game.

Occasionally, some unzipped files create only a single .EXE file, which is likely the installation program for the game demo you've just downloaded. In this case, double-click the file to start the set-up procedure.

Troubleshooting

If you are having a problem with a downloaded file, it is possible that
i) the file was not downloaded completely (your modem disconnected before the file finished downloading, for instance),
ii) or that the file's contents - such as a demo - are conflicting with your system,
iii) or there is always the unfortunate possibilty that the download has become corrupted.

In the case of a system conflict, please contact the program's publisher for assistance. Unfortunately, many companies will not provide technical support for demos, but it never hurts to ask. In either of the two remaining instances, simply try the download again.
It is a good practise to record the file size of your download. Should the size of your downloaded file differ greatly from the source, you may have a warning that the file download was unsuccessful.

DirectX Drivers and .DLL Errors

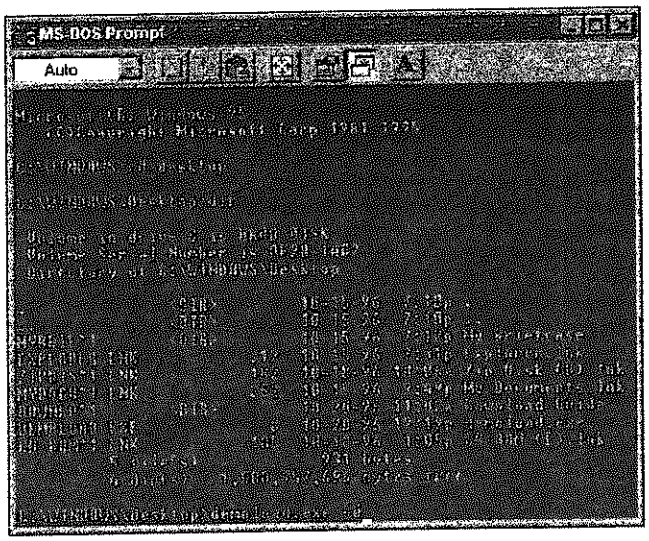
Many demos require particular drivers or extensions to work properly. The most common example is Microsoft's DirectX drivers, which are required by nearly every Windows 95 native demo. Basically, the DirectX drivers are a series of components that help games run more effectively under Windows 95.

Missing DirectX drivers are the cause of errors such as "Can't find DDRAW.DLL." If you receive this or a similar .DLL error (.DLL is the file extension for drivers), chances are you need to install DirectX.

Download the DirectX drivers, visit the Utilities section.

The Mysterious "-d" Flag

Many demos will only work if they are installed in a predetermined series of directory folders. In ordinary English, this means that the same directory folders in which they resided when the developer created the demo must be duplicated exactly on your hard disk. Unfortunately many self-extracting files (with the .EXE extension) do not automatically recreate the correct directory folder structure. Fortunately there is a handy trick you can perform - known as the "-d" flag - which corrects this nasty oversight. Here's how to use it:



1. Create a new folder for the self-extracting file you downloaded. Why? Good housekeeping. When you extract the contents of a self-extracting file, you sometimes get numerous folders that litter the Desktop. But if you place this file in a folder, the extracted contents will remain in the folder.

2. To create a folder, go to the Desktop and click the right mouse button. Select the "New" menu option, then "Folder" on the next menu.

3. A new folder will appear on the Desktop. Type in the folder's name.

4. Move the file you are about to extract to the new folder.

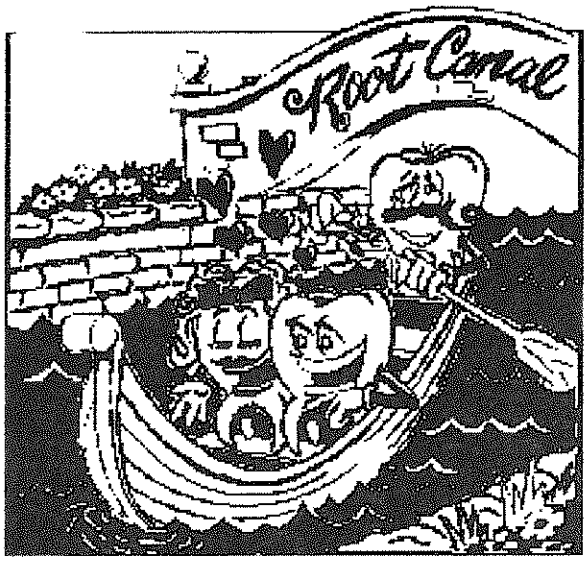
5. Click the Start menu and choose Run.

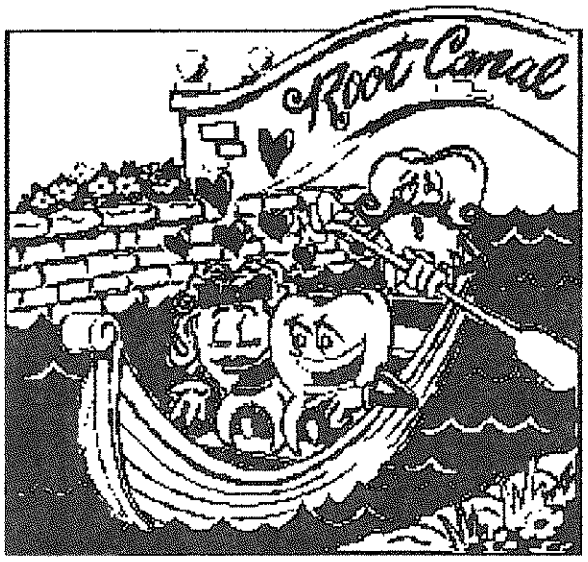
7. To expand the self-extracting file using the "-d" flag, type in the file's name, followed by a space, then "-d" (without the quotation marks). For instance, to extract the contents of a file named "bakudemo.exe," you'd type "bakudemo.exe -d".

8. Press Enter. The .EXE file will run, expanding whatever files it contains into the new folder on the Windows Desktop.

9. Once the self-extracting archive has worked its magic, you'll still have to complete the installation procedure - such as installing a game demo, or loading a new software driver. Check the newly-created folder's README file for installation advice.

END OF ARTICLE





There are ten deliberate differences between the two pictures above.
See if you can find them?
The bottom picture is the original

Forget not on every occasion to ask thyself , is this not one of the unnecessary things ?

Marcus Aurelius (121-180 A.D.)

The IBM SHOP

with Cyril Bohlsen

Parallel printer cable 1.8M	$ 5.00
3 Button mouse new	$ 14.00
2 Button 'Microsoft mouse' new	$ 33.00
WIN95 Keyboard 104 keys	$ 20.00
Keyboards S/H	$ 10.00
3.5" Mitsumi floppy disk drive	$ 35.00
16 bit 'KTX' ESS sound card	$ 35.00
Splitter cables	$ 6.00
3.5" power adapter cable	$ 6.00
3.5"-5.25" FDD mounting kit	$ 8.00
3.5"-5.25" H/disk mounting bracket	$ 8.00
15-9 pin "D" adapter for Monitor	$ 6.00
Auto Print Switch Agilier AGX-201P	$ 15.00
Heatsink for 486 CPU	$ 2.00
Intel 386DX-20 CPU	$ 5.00
486 M/B + 'Intel' SX25 CPU	$ 25.00
486 M/B + 'AMD' SX 2x50 CPU	$ 45.00
486 M/B + 'Intel' DX50 CPU	$ 50.00
16mb Simm 72 pin 60ns EDO	$ 95.00
8mb Simm 72 pin 60ns EDO	$ 50.00
4mb Simm 72 pin 60ns EDO	$ 35.00
4mb Simm 30 pin 70ns with parity	$ 48.00
1mb Simm 30 pin 70ns with Parity	$ 12.00
1mb Simm 30 pin 80ns with Parity	$ 10.00
256k Simm 30 pin with Parity	$ 8.00
30-72 pin Simm adapter	$ 20.00
486 VL Buss mother board S/H	$ 10.00
386 Mother board with DX40 CPU	$ 30.00
Windows 3.1 software & book	$ 20.00
Windows 3.1 book only	$ 5.00
Lotus Smart Suite97 CD	$ 30.00
World book entertainment pack (8 CDs)	$ 40.00
Deluxe compact disk pocket (holds 8)	$ 10.00
5.25" Disk storage box (100)	$ 10.00
3.5" Disk storage box (100)	$ 10.00
3.5" HD Laser floppy disks	$ 6.00
3.5" HD Data Max colour floppy disks	$ 7.00

For current pricing of items not listed please contact Cyril Bohlsen at the general meetings or Phone (02) 9639 5847

NOTE : All prices listed are at time of printing, and may change at any time. Prices do not cover posting and packaging.

FOR SALE

IBM 386DX33 COMPUTER

386 MOTHER BOARD
INTEL 386DX33 CPU
50MB HARD DISK
2 SERIAL, 1 PARALLEL, GAME PORT.
512k VGA CARD
1.44MB FDD
4MB RAM
DESKTOP CASE
14" VGA MONITOR
101 KEYBOARD

PRICE ..... $ 250.00

NOTICE :-

To aide the cash flow of the Club finances, it has been decided by the Directors that a deposit of 50% will be required with all orders of new computer systems, and final payment to be made on delivery of same.

NOTE :- Payments can no longer be made by credit card, as we no longer have this physicality.

Getting the Date and Time into Environmental Variables.

From John Paine

Trick: You can get the date or time into an environmental variable using either of two sets of batch files.

To solve the problem of how to get the DATE into an environmental variable without using outside programs, two individuals created batch files as solutions. The solutions are excellent examples of batch file gymnastics. The first example was created by Barry Simon, professor at the California Institute of Technology and contributing editor to the Washington PC Users Group newsletter and PC Magazine. The second example was created by David Frier of Logical Software, Inc., a Washington, D.C., area consulting firm. Barry Simon's approach uses only batch files. David Frier's approach shows an innovative use of EDLIN, the DOS line editor.

Barry Simon's approach uses two existing batch files and a third batch file that is created dynamically. The first batch file can have any valid batch file name. The name of the second batch file, SILLY.BAT, is created by the first batch file and can be modified. The third batch file must be called CURRENT.BAT. The three batch files follow:

```
ECHO THIS IS SILLY I MORE I DATE >SILLY.BAT

SILLY
```

and

```
SET DATE=%4
```

To understand the gymnastics, remember that DATE needs a carriage return. Using ECHO THIS IS SILLY is just a way to pump some characters into MORE (any single printable character could have been used for THIS IS SILLY). MORE appends a carriage return to the output. The output is shuffled to DATE, which demands a carriage return; this explains the strange construction of the entire first line. The output of DATE is sent to a file called SILLY.BAT. The last line of the first batch file invokes SILLY.BAT.

To understand the second phase of the gymnastics, consider the output of DATE. On my machine, the contents of SILLY.BAT was as follows:

```
Current date is Sat 12-17-1988
Enter new date (mm-dd-yy):
```

When SILLY.BAT runs, DOS interprets the first line as a command. The command is to run something (a program or batch file) called CURRENT. Because DOS runs the CURRENT.BAT file, control is transferred one-way from SILLY.BAT to CURRENT.BAT. The second line of SILLY.BAT (Enter new date) never executes.

CURRENT.BAT uses the fourth parameter in the line and places it into the environmental variable DATE. The result is an environmental variable called DATE with the contents of 12-17-1988.

David Frier's example uses three existing files: a batch file called DATER.BAT, a CR file that holds a single carriage return, and an EDLIN script file called EDDATE. Following are the contents of DATER.BAT:

```
DATE <CR > STAMP.BAT

TIME <CR >> STAMP.BAT

EDLIN STAMP.BAT < EDDATE > NUL

STAMP
```

DATER.BAT runs the DATE and TIME commands and redirects the output to a file called STAMP.BAT. The <CR forces a carriage return for the DATE and TIME commands.

The DATER file then runs EDLIN. A notable feature of EDLIN is using an established text file for scripting EDLIN commands. EDLIN accepts commands from standard input, which means that EDLIN can be directed by keystrokes to get its commands from a script (standard ASCII) file. The EDDATE file is used to script EDLIN to perform certain edits to STAMP.BAT. To create EDDATE, type the following command at the DOS prompt. (Note: EDLIN should always be in your path for this example to work.)

```
EDLIN EDDATE
```

EDLIN responds with the following prompt:

```
*
```

Following are the commands (in bold) used to create EDDATE; the prompts are included as references. Type the lines in the following sequence and finish each line with Enter. The <> sequences denote keys you should press (the F3, F6, or Del keys) rather than typing the signs and letters.

```
*i
  2d
  3d
  1.2rCurrent <F6>set boot
  1.2r is <F6>=
  1i
  @ECHO OFF
  <space> <F6>
  e
  <F6>
*7
  ^Z
  <DEL><F3>^Z
*e
```

Notice that when you press <F6>, the ^Z character appears on-screen. I have filled in the ^Zs in their respective places for your reference.

The EDDATE file first deletes the lines that ask for the date or time, then replaces the Current sequence with set boot, a space, is, and a space followed by =. The EDDATE file then inserts the line for setting ECHO to off, ends the insertion of lines, and then ends EDLIN, which saves the new version of STAMP.BAT.

Because this batch file places variables into the environment, you may want to increase the amount of space that DOS sets aside for the environment. You can increase the amount by placing the following line into your CONFIG.SYS file and rebooting.

SHELL=C:\DOS\COMMAND.COM /E:800/P

This command increases the environment table to its maximum of 800 bytes.

The result, after successfully rebooting and running the DATER batch file, is two environmental variables named BOOTDATE and BOOTTIME. My display showed the variables as follows:

BOOTDATE=Sun 12-18-1988
BOOTTIME=12:46:11.92

Both approaches work and are excellent examples of the gymnastics you can perform using batch files and redirection. If you need more flexibility, a utility such as BATKIT or a full-function command-line utility such as CED or PCED works faster and better.

END OF ARTICLE

MILLENNIUM BUG

This is an extract from an article in the Sydney Morning Herald

Typed by Cyril Bohlsen

As you are aware most computers older than about two years of age, as well as some newer ones, will misinterpret 2000 because the number will be abbreviated to 00, causing the computer to crash or give wrong answers.

A young boy has written a programme that will allow computers to continue to work properly after the 31st December 1999. His name is Nicholas Johnson, from Christchurch New Zealand and is aged only 14 years

His programme checks to see if the computer's BIOS recognises dates into the next century. If it detects a problem, the programme updates the memory as 2000 rolls over and every time the PC is switched on thereafter if necessary.

Experts worldwide have warned that many older PC up to the 486 models, as well as some early Pentium models, will fail as the year 2000 opens and may need to be replaced.

The Christchurch boy's programme will not fix problems with computer applications such as accounting software and spreadsheets, which will cause expensive refits for large businesses.

He hopes software firms will adopt the product and market it to PC owners worldwide.

END OF ARTICLE

YEAR 2000 CHANGEOVER

By
Percy Harrison

There has been much media exposure concerning the problem that PC owners will face at midnight of 31st December, 1999 at which point in time computers will try to change the date from 31/12/1999 to 1/1/2000. For most computers which have BIOS chips produced after mid 1997 this should not be a problem as they are probably already programmed with the changeover to the year 2000 taken into account but for many PC's purchased before that time the change-over to the year 2000 will not occur automatically and, indeed, on some computers will not occur at all.

By way of explanation, most computer applications get the system date from the operating system, whose software-based calendar is initialised at bootup from the BIOS firmware, which gets the date from the CMOS RTC, which is system hardware. The CMOS RTC maintains a two-digit year, so the BIOS appends those two digits to a pair of stored century digits thus providing the four digit year to the operating system. As the century digits are not maintained by hardware, they are not incremented when the year changes from 99 to 00; the result is that when the change-over occurs the year 1999 will be incremented to the apparent year 1900 and thus your computer would result in an erroneous system date.

On the computers that I have tested, that do not change to the year 2000, some revert to the date 4/1/1980 and others to the date 1/1/1994. Of these two dates it would appear that computers reverting to the 4/1/1980 date can be fixed by installing a small program (700 Bytes) on the computer but at this point in time computers coming up with the date 1/1/1994 cannot be readily fixed except by obtaining a new BIOS chip, programmed to handle the problem, providing one is available that is compatible with your motherboard, otherwise you will most probably have to fork out for a new motherboard ie: upgrade your system. Ouch doesn't that hurt the hip pocket.

Testing your system for the year 2000.

The following test requires that you simulate December 31, 1999 and January 1, 2000 in your computer. Before you change your system date to the 31 December, 1999, consider whether your system software might automatically do something that you'd rather avoid. For example, if you run a scheduler that will automatically delete events in the past it might discard any appointments that you have scheduled for the period between the day you run the test and the 1 January, 2000. To avoid this, either temporarily disable the susceptible software or temporarily remove it from the Startup group or folder. If you do not run software that is automatically triggered by date, you need not take any special precautions. Alternatively, you might consider booting from a bootable diskette to avoid your main applications altogether.
You can determine whether your system suffers from the 1900-2000 date transfer flaw as follows:

From the DOS prompt:
Type DATE and press ENTER
Type the date: 12-31-1999 and press ENTER
Type TIME and press ENTER
Type: 23:58 and press ENTER
Turn your computer off and wait for 5 minutes
Turn your computer on and check the DOS date by typing: DATE.

The date should now be 01-01-2000. If it's 01-04-1980, the computer exhibits the year 2000 flaw and can most probably be corrected using the Year2000.Com program a copy of which will be available for personal use only from the club at no charge providing you supply a blank 3.5 floppy diskette and include return postage if ordering by mail. If your computer comes up with any other erroneous date then you can try the Year2000.Com program but be prepared for the worst and that is that you most probably will have to upgrade part of your system.

Having determined that your computer will handle the change to the year 2000 from the above test, there are at least three ways in which you can effect this change.

1. Manually by waiting until the year 2000 arrives and then accessing your BIOS and changing the date and saving it

before quitting out of the BIOS menu. This should only be carried out by persons familiar with BIOS setup as there is a high risk of causing a serious failure with your computer if you do something wrong.

2. Manually by waiting until the year 2000 arrives and then physically entering in the DATE and TIME from the DOS prompt.

3. Automatically, by copying the Year2000.Com file into a directory on your Hard Driveas follows:

Create the directory:
C:\YEAR2K

Copy the file: Year2000.Com to the directory

Now add the following line to your Autoexec.bat file:

C:\YEAR2K\Year2000.Com

The program will work properly under DOS through Windows 95.

The first time your computer is turned on after midnight on the 31 December 1999 the Year2000.Com program will automatically run and the date change to 1 January 2000 will be made on your system.

Acknowledgement: Tom Becker,
The RighTime Co., Miami.

END OF ARTICLE

QUESTION ??

by John Paine

Anybody know how to check to see if a directory is in the PATH statement and append it IF and only IF it isn't already part of the string????

Here's a little batch file I use occasionally. It should give you enough to go on to answer your question...

- @Echo Off
- Rem WHICH.BAT
- If Not "%*%" == "" Goto Search
- If Not "%1" == "" Goto Start
- Echo.
- Echo Syntax: WHICH program
- Echo. 'program' may contain wildcards, but must not include
- Echo an extension or path information.
- Echo.
- Goto Exit
- :Start
- Echo.
- Set *=%1
- Call %0 . %Path%
- Set *=
- Echo.
- Goto Exit
- :Search
- If Exist %1\%*%.COM For %%F In (%1\%*%.COM) Do Echo %%F
- If Exist %1\%*%.EXE For %%F In (%1\%*%.EXE) Do Echo %%F
- If Exist %1\%*%.BAT For %%F In (%1\%*%.BAT) Do Echo %%F
- Shift
- If Not "%1" == "" Goto Search
- :Exit

(Editors comments) Please note! The bullets represent one line, we had to shorten the line to fit in with the magazine's column width.

END OF ARTICLE

Welcome to New Members

The Directors extend a hearty welcome to the following members who have recently joined the club:

Andrews, David
Kerkin, Philip
Ferretti, Phylis
McDonald, Jim
Gibson, Edna & Ron
McQuade, Catherine & Mary
Gordon, Robert

We look forward to seeing each of you at our meetings and trust that you will benefit from being an active member. Should you have problems with your computer or in running particular software please talk to one of the directors and we will endeavour to sort out any problem you have.

Percy Harrison (Secretary)

Troubleshooting Strategy

Anonymous author

To establish your troubleshooting strategy after gathering information, follow these basic steps.

Analyze symptoms and develop a strategy

Analyze the symptoms to determine your approach to resolving the problem. Under what conditions does the problem occur and not occur? Which aspects of the system control those conditions? Is the problem specific to a subsystem (for example, networks or video)?

Modify your system or the program, and then test again. Minimize the number of things you change between tests. If you find the problem goes away at some point, try adding things back in until you isolate the cause of the problem.

Isolate the error condition

Try to isolate the specific cause of the error by changing a specific value, and then testing for whether the error condition is corrected or altered. For example, if you suspect the system registry is corrupted, you might want to rename the system registry (SYSTEM.DAT) and replace it with SYSTEM.NEW, and then test again.

If a component fails after you have upgraded to a new driver, replace the new driver with the original driver, and then retest. If startup hangs on a real-mode device driver, or if you suspect that any device driver is causing the error condition, you can restart your computer, press F8 when you see the "Starting Windows 95" message, and then choose "Step-by-Step Confirmation" to test the effect of not loading a suspect device driver.

Test and then write down the results

Test each modification individually to see if it fixed the problem.

Note all symptoms, causes, and solutions. This will provide you with the information you need if you have to contact product support personnel, and it also provides an excellent reference for future troubleshooting.

Check to see if the problem you're having is a known problem

Make sure you check the Release Notes, the online Help, and the Frequently Asked Questions (FAQs) posted in the Windows 95 CompuServe forum, plus the README.TXT, PRINTERS.TXT, NETWORKS.TXT, and/or FLASH.TXT files included on the Windows 95 distribution disks.

For persistent problems, you may want to post the problem on the appropriate CompuServe forum. Other users may already have discovered, reported, and found workarounds for your problem. Suggestions from others may save you time tracking down the source of the problem and give you ideas that can help you.

Verify software fixes

If you are told that a problem is fixed in a new file or release, its important to verify that the original problem has been fixed.

If you used a workaround for a specific problem, make sure you try removing the workaround when you receive updated software. It's easy to forget that you've changed the system to allow something to work and forget to test the original problem after it's been fixed.

Restore the system

Before you leave a computer that you are troubleshooting, return the computer to a state that is as close as possible to the way you found it. Obviously, you will have made changes that affect the computer; but you should make sure the computer is entirely operational.

Tips for troubleshooting

Always make backup copies of configuration files (especially the SYSTEM.DAT file).

Create and maintain a startup disk.

Test your startup disk for complete functionality before you need it.

IBM

Computer Servicing and Repairs

At a recent Director's meeting it was decided that repairs and servicing of members computers would be restricted to the following days and times:

1. Club Meeting Day. The first Saturday of each month except January between the hours of 10.30am and 1.45pm. No work will be done on computers during the talks given by our guest speakers. Work outside these times on the Saturday will be at the discression of those carrying out the repair work.

2. The first Friday evening after the monthly meeting between the hours 7.00pm and 12.00 midnight at Cyril Bohlsen's residence.

3. Any repairs required outside of these two periods would only be undertaken by agreement with the person required to carry out the work and must be arranged with the repairer before fronting up.

Any member having problems with their computer and needing assistance to get it up and running should let Cyril Bohlsen or Percy Harrison know in advance so that their work can be scheduled for repairs on either of the days nominated above.

Your co-operation in adhering to these conditions and times would be greatly appreciated as this work does intrude into the personal life of our volunteer workers.

Percy Harrison (Secretary)

How to contribute to your Magazine

All or or posted to TIsHUG C/O 3 Storey St. Ryde 2112 Australia
We are able to publish articles forwarded to us in the following manner.

- Printed letters or articles
- TI Computer floppy disks....5.25" DSDD or DSSD.....Text files, Funnelweb or TI Writer
- IBM compatible Floppy Disks.....5.25"or 3.5", we can process - text files, Word for Windows ver: 1.0 - 6.0, WordPerfect, and Word for Macintosh ver: 5x. (on a IBM formatted disk)

These items can be posted to the above address or could be handed to the Editor or one of the Club Directors. Please put your name on the disk so it can be returned

SPEAKERS CORNER

I would like to thank Christine O'Connell for her excellent presentation at our last meeting.

Christine spoke on M.Y.O.B., a complete software package for running a business including payroll. In fact it seems to have everything including a banking facility should you require it.

Christine's presentation was very professional so if you have a small business or you know someone who has, this package could well be the one for you.

Christine can be contacted on 9878 3195 or mobile 019 467 768.

Our next Guest Speaker will be Paul Bonnice. Paul uses "Publisher" to design components for the repair of boats. He has a boat repair business in Rushcutters Bay and repairs craft from the small runabout to the maxi yacht we see racing in the Sydney to Hobart race. Many of the components used have been designed by Paul using only "Publisher".

Once again, this should be a most interesting talk.

John Herbert

continued

WORMS and VIRUSES

operating system which is used by the IBM PC, the most popular microcomputer. In other words, this is no back yard company. It is one of the two or three software giants in the U.S. (It's owner is under 30 years old, which tells us something about who is pioneering the microcomputer revolution. As he was setting up his computer to take advantage of this telecommunications program, a warning flashed on his screen: "The weed of crime rears its bitter fruit. Now trashing your program disk". WHAM! He lost all his files and probably a couple of years worth of work. Sure, he was probably smart enough to have mad back-up copies, but think of the risk. And what if it had been a worm that kept silent for a few years, infecting all of his backup disks? He called Microsoft, and they gave him the run-around. They told him that they were not responsible. Some programmer had put in the worm in order to zap program pirates, but the journalist insisted that he was an original buyer. Tough luck, they told him. Obviously, they didn't know that he was a reporter. Then he published his article. All of a sudden, the victim was not some average buyer. He was BIG TROUBLE. Things started moving. INFOWORLD reports that MICROSOFT has admitted that a programmer put in the worm, but without permission. The offending text has now been removed, we are assured. But what if it had sat in the master for three years? HERE IS THE PREMIER FIRM IN THE SOFTWARE BUSINESS, AND IT HAD AN unauthorized PROGRAMMER INSERT A WORM. This is not idle speculation. It has already happened, verifying my hypothetical scenario within a few days after I published it. Can you imagine the absolute havoc that a dormant worm or virus could create if it were imbedded in all updates of MICROSOFT' s masters of PC DOS and MS DOS, the operating systems for all IBM microcomputers and IBM compatible microcomputers? It could cost the U.S. economy billions, and some microcomputer-dependent firms wouldn't survive. Any Microsoft spokesman who says, "it's impossible; it could never happen" has to explain how it already did happen to "ACCESS" .

ADAM OSBORNE'S WARNING

You may know the name ADAM OSBORNE. He invented the revolutionary portable computer, the Osborne1. Before there was an Osborne2, the company went bankrupt. Compaq, the most successful first-year firm in the U.S. history (over $100 million in sales in its 12 months of operations) and others built imitations that were far superior. That isn't my point, however, Adam Osborne was "present at the creation" of the microcomputer industry. He created Osborne publications, and then sold out to McGraw Hill. He knows what is going on. In his delightful paperback book RUNNING WILD, which is a history of the microcomputer (desk top) revolution, 1975-82, he offers this warning. He says that three areas should not be allowed to be computerized:

1) bank money transfers:
2) the stock market: and
3) elections.

All three are just about fully computerized. Another ten years, or maybe five, and they will be 100% computerized. Several firms allow microcomputer buying and selling of stock (e.g. Charles Schwab) , and New York Stock Exchange floor transactions eventually will be fully computerized, at which time it will be pressured to get rid of the "specialists" who make (and sometimes manipulate) the market, short-term - - Richard Ney's hated "Wall Street Gang" - - but the price of getting rid of them may turn out to be horrendously high. "The great fortunes of the 21st century, "Osborne predicts," will be the legacies of the great computer thieves of the 20th. "Three years ago, I used a firm to supply computer services I needed. The head of it was a former business man, quite young, and a true "space cadet" . I've quoted him in the last issue. I call him "TOM" . He operated in a world far removed mentally from the rest of us. He is a nice fellow, a Christian, and a moral philosopher of sorts. He ran the operations of the local elections. He did if fairly inexpensively. He told me why: I want to keep these elections honest. It would be incredibly simple to rig the program to produce whatever outcome I wanted, in close races, if I could do it, anyone with enough skill to set up the system could do it. I asked him if he thought Osborne was correct in his predictions about bank theft. "It would be a piece of cake for me to steal three or four million from any local bank. I could go in the next week, offer to give 90% of the money back, keep 10% as a finder's fee, and promise not to tell the press how easy it was to steal. They would probably pay me my 10% just to keep me quiet. " Look, these people are geniuses. Worse, they are geniuses in a very narrow field technically, which is now being used to control damned near everything. This unique intellectual-technical skill is the possession of literally a handful of people, most under 35 years of age. They are 'fooling around' with Chase Manhattan Bank's computers. What happens when a few of them stop fooling around and get deadly serious? " Computer program designers keep telling us that there is no 100% secure way to defend data banks. Maybe there will be a 98% secure system someday, but not now, THE SYSTEM RELIES ON THE INTEGRITY OF YOUTH TO DEFEND ITSELF. In short, SELF-GOVERNMENT is the major defense. And where have they learned self-discipline? In the public schools?

"NOW YOU'VE DONE IT!"

About four years ago, I read an article in the ROLLING STONE, the tabloid aimed at rock music fans. It was the only article I ever read in that periodical. It was a gem. It described a subculture of students at Stanford University, "Hackers" . These people are computer freaks. The mainframe computer at Stanford was cheaper to use after midnight, so from midnight to 6am the hackers gathered at their terminals. They lived on candy bars, junk food, and high technology dreams. One of the games they played was breaking into each others programs. It was considered the mark of a master hacker to be able to crack another hacker's defenses. They would spend hours trying. They were "Hacker - crackers". One bright fellow then designed a classic booby trap. He wrote a program which warned trespassers not to tamper with it. This, of course, alerted every would-be electronic safe-cracker to the challenge. It was a complex program, and it took days to crack it. Then, after repeated warnings, the successful trespasser got a surprise. Japanese letter appeared on his screen. Roughly translated, the words proclaimed, "Now you've done it!" . At that point, the victim's computer screen went blank. Then the names of all his own computer files appeared on the screen - - files that may have taken years to assemble. One by one, they blipped off the screen. In horror, the victim would stare at the screen, unable to stop the process. As it turned out, the booby trap was only a practical joke. It really didn't erase all the victims files. It only listed the NAMES, and then erased them. But for a horrifying few minutes, the victim wouldn't know this. HACKERS play games. Very INTERESTING games. The kind of people who spend six hours, midnight to 6 am, trying to break into each other's programs are different from the rest of us. Among their ranks are some highly individualistic people. Some of them are libertarians, I mean anarchists. They are electronic "don't tread on me" sorts of people. They do not appreciate bureaucracy . They appreciate being pushed around even less. The folks at Chase Manhattan really do have a problem. Do you attempt to prosecute a legally unprosecutable kid? A kid who has already cracked your computer system? I don' t think you do. You play the role of stern but appreciative banker. "Son, I am impressed by your ability to break in. But understand, we are honest people. There is a code of honor here. You wouldn't want to break that code - - of honor, I mean - - would you? "Because if this kid gets angry, he can do it again. Quietly. And next time, he deposits a virus. Of course Chase may hire a programming team to create an unbreakable system. Sure, "Hire a Fox- A). Give him a chain link fen ce,- B). Hire him to build fence "B" around chicken coop "C". "

TEEN CHALLENGE

Suppose that the public gets wind of the threat to the whole banking system which is infected by a virus? What do the bankers (or anyone else) announce to the public? "We want to assure you that our computer program is impenetrable. No one can break in. It is foolproof. "Here is a challenge - - rather like the Stanford program that announced: "Do not Trespass". These kids see breaking in as a challenge, a kind of sport. They do not regard it as vandalism, even if it cost a company millions of dollars to unscramble. They may be ethical in other respects, but they think of "Core Wars" as a game. How would you like to be the 60-year-old banker who doesn't know a byte from a usury, but whose public relations department tells him to inform the public that nobody can crack his bank's code? To cite Mr. T. In "Rocky III" , that bank is dead meat. So are its depositors. But if he keeps quiet, and the story still gets out about the vulnerability of the system, one or two small "virus- demolished" banks could trigger a collapse of the system, as people do the only smart thing: run for CASH. The whole fractional reserve banking system would deflate: only the FED's printing presses could "save the day" , in a wave of fiat money. What I am saying is this: I THINK THAT WE WILL SEE THE END OF FRACTIONAL RESERVE BANKING IN OUR DAY. At the very least, I think we will see it subjected to tremendous shocks. People will lose faith in electronic promises made by bureaucrats who do not know anything about the monsters that their efficient computers can be turned into.

ATTACK ON MARTINSBURG

Now, let' s take it a step farther. Some day some state or Federal bureaucrat is going to step on the toes of some genius entrepreneur who has created a software development firm. The bureaucrat will try to wrap this entrepreneur in red tape. Or maybe - just maybe - he will try to sock him with a tax bill that the entrepreneur regards as unfair. In Martinsburg, West Virginia, there is a large computer. It is owned and operated by the Internal Revenue Service. Into it, over the next five years, the IRS apparently intends to deposit all the records it can assemble on every US taxpayer. This computer data base will be the biggest in the world. It is the tool by which the IRS hopes to increase taxpayer compliance. And it may succeed. For a while. This is one reason for saving all letters to and from the IRS. If the IRS becomes dependent on its computer system, which is likely, then any short-circuiting of its data base could create havoc for tax collecting. If word gets out that a major failure has hit the IRS, the tax revolt could multiply overnight. You would see the deficit become astronomical. If the IRS continues to tie its "voluntary" compliance program

to the myth of "the all-seeing computer", then news of the computer's scrambling could backfire. It is possible that the story of the IRS data base is a myth. Maybe they aren't going to build it. But if the public believes that such computer power is at the disposal of the IRS, and taxpayers then learn either that the system has been blown or that it was mythical from the start, the tax revolt could spread like an epidemic. HE WHO LIVES ON THE CUTTING EDGE OF TECHNOLOGY EVENTUALLY DIES ON THE CUTTING EDGE OF TECHNOLOGY.

PEOPLE ARE BASICALLY GOOD

Let's return to my on tape interview with " TOM" . In a 90 min interview, we covered a lot of ground. But one topic which stands out in my mind is our discussion of the presupposition which goes into the creation of a computer based society. The computer people have all adopted the assumption which undergrids modern science, namely, that participants are well-meaning, that they will not fake their experiments, and that they will play fair.

If scientists had to check every aspect of every article, science could not advance very fast. What about the computer industry? The whole system rests on faith: "Men are not malevolent". They are not envy-driven. They will not deliberately seek to destroy the work of one random victim. Tom says categorically that this assumption is false. There are bad people with tremendous computer skills, and that modern society has not restructured its economic institutions to protect itself.

Here is one example of a break-in technique. Someone telephones into a computer which has been left open temporarily by some user. The lock is unlatched; he needs no key to get in. He then seeks to penetrate the inner core of the program, such as a bank's program. He creates a deliberate error, which all to often triggers a kind of electronic explosion. The protective shell self-destructs, and the invader now finds himself inside the system, where far fewer defense mechanisms exist. Tom has designed his own firm's defense against this tactic. His program automatically records the source of the error, and throws the user out of the program. The program has protection against deliberate errors, but most of them don't, he says . A major error simply collapses the programs outer shell. In my previous issue, I speculated that a Soviet spy or agent could penetrate US computers. NOTE: I did not assume that he would simply phone in; I assumed that a disloyal programmer, or a team, could plant the virus as insiders. From there, the virus would spread through the system through normal telecommunications. Several people have written in to tell me that a wrecker cannot destroy the system by penetrating it from outside. They may be correct. But when informed that I am assuming an INSIDE JOB by someone with access to a major computer, the critics have admitted that this might be possible. The weed of crime bears bitter fruit: FOR HONEST, COMPUTER DEPENDENT PEOPLE.

FEDERAL FUNDS

The Federal Funds bank transfer lines allow banks to borrow money overnight. Hundreds of billions of dollars go across these lines every working day. The bank's computers communicate with each other by means of this telecommunications hook-up. What if someone were to plant a long delay virus in the software which operates these transfers? And what banker has even thought about this problem? What if this scenario were to take place: A virus triggers the disruption of bank records - total breakdown initially, but disruptions in the data? It might be weeks or months before auditors recognized the extent of the problem. As rumors then explode. The lines appear in front of banks. The only answer at this point is to print up paper money. It would be printed by the hundreds of billions in order to off set the deflationary effects of bank runs (paper money which is pulled out but redeposited in another bank). YOU COULD TOPPLE THE FRACTIONAL RESERVE BANKING SYSTEM ALL OVER THE WORLD. The entire payments system could easily become engulfed in chaos. Debits and credits would no longer be meaningful. A pure paper money inflation would replace the manipulated "fine-tuned" monitory inflation of modern central banking. All of a sudden, market-created alternative currencies would be revived. It would then be METALLIC CASH that talks loudest. Silver dimes are not electronic. They can't be infected electronically. They still circulate when banks are "temporarily closed, due to circumstance beyond our control". The loss of efficiency would be initially horrendous, I would guess. The division of labor would break down. You could say that the crash lurks in the minds and suspicions of the average depositor. Who says it cannot happen? A lot of public relations firms hired by the banks - computer illiterates in high places? What we have is AN INTERNATIONAL BANK MONEY WIRE SYSTEM which is TOTALLY VULNERABLE to some vindictive programmer. There is little doubt in my mind that the bankers are desperately fearful of this sort of vandalism. It could topple people's confidence in the fractional reserve banking system, and confidence is the only thing which keeps it going.

CONCLUSION

Technologically, there is no solution at this point. I have no heartening message. Maybe later; not now. Keep precious metal coins. Don't assume that it can't happen here. It can. The only thing holding it back is the restraining hand of God, through the temporary SELF-restraint of a technological priesthood. Neal Macklin (408) 737-5214

There are NO OPINIONS expressed in this article.

END OF ARTICLE. Hope you enjoyed it.

Environment Size

by John Paine

Greetings all, seeing how I've received a number of requests to post the strings in MsDos command.com to change the default environment size in secondary shells, here is the info. I won't bother with debug offsets etc, just use a hex editor and search for the following strings and make the necessary changes needed:

In MsDos 5.0 and 6.0, the string to search for:
21 58 00 C7 06 5D 21 10 00 BA OC AA B1 04 D3 EA
^^

In MsDos 6.20 the string has changed a little:
21 5A 00 C7 06 8D 21 10 00 BA 8A AF B1 04 D3 EA
^^

In MsDos 6.22 the string has changed again.. (Just Released 5/31/94)
21 5A 00 C7 06 8D 21 10 00 BA A4 AF B1 04 D3 EA
^^

Change the marked bit to increase the default environment size to one of the following values; this affects primary and secondary shells, and if anybody uses Desqview and run's out of environment space, this will fix it.

20 = 512 bytes
30 = 768 bytes
40 = 1024 bytes
60 = 1536 bytes
80 = 2048 bytes
FF = 4096 bytes

END OF ARTICLE

Christmas music for TI on web page

From Dave Clark
From bsnyder@enter.netSun Dec 29 13:13:07 1996
Subject: TI99: Christmas music for TI on web page.

Just wanted to let you know that I put up a web page with my disk of Christmas music available for downloading. The program runs in Extended Basic. In the future I hope to have more software available to download. The address is:

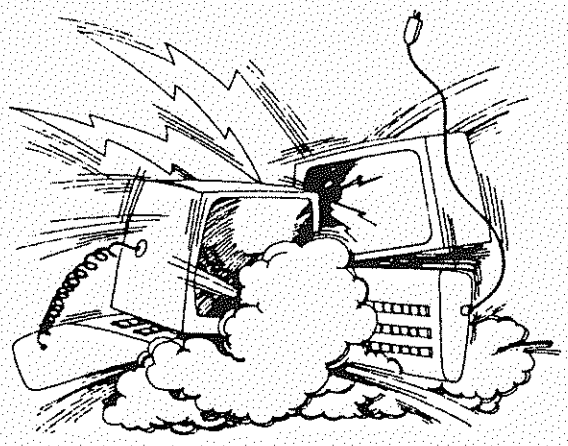
http://www.enter.net/~bsnyder

Once you download the file to your PC, transfer it over to your TI and run ARCHIVER to unarchive it to a disk. You MUST rename the disk to XMAS_MUSIC for the program to work. Even though the file name ends with .zip, it is not a zip file for a PC. I named it that way so that your web browser would download it.

If you have PC99, you can DL the Christmas music to your PC and then run the DLCONV utility included with PC99 to convert the file. Then run DSKIN to place the file on one of your PC99 drives. Then fire up PC99 and run Archiver to unarchive the disk. Just like on the TI, you must rename the disk to XMAS_MUSIC for the program to work.

If you have any questions or comments, please leave me a message or an email.

Later. . . . . Brad
—
Brad Snyder -- bsnyder@enter.net
bbs: 610-760-0527
http://www.lehigh.edu/~bls3/bls3.html



REGIONAL GROUP REPORTS

TIsHUG in SYDNEY

Monthly meetings start promptly at 2pm on the first Saturday of the month. They are held at the **RYDE EAST PRIMARY SCHOOL, HALL** located at TWIN RD North Ryde. Plenty of off street parking is available and is accessed from Badajos Rd North Ryde. Regular items include news from the directors, the publications library, the shop, and demonstrations of monthly software.

OCTOBER MEETING 4th OCT 1997

NOVEMBER MEETING 1st NOV 1997

ILLAWARRA

Regular meetings are normally held on the first Tuesday of each month after the TIsHUG Sydney meeting at 7.30pm, at the home of Geoff Trott, 20 Robsons Road, Keiraville. A variety of investigations take place at our meetings, including Word Processing, Spreadsheets and hardware repairs. Contact Geoff Trott on (042)296629 for more information.

Meeting Summarys for SEPTEMBER

Central Coast	11/10/97 Saratoga
Hunter Valley	12/10 19/10/97
Illawarra	07/10/97 Keiraville
Liverpool	10/10/97 Yagoona West
Sutherland	17/10/97 Jannali

HUNTER VALLEY

The meetings are usually held on the second or third Sunday of each month at members homes starting at 3pm. Check the location with Alan Lawrence on (049)486509. Please note that the previous phone number (049)428176 is now used exclusively by the ZZAP BBS which also has TI support.

CENTRAL COAST

Regular meetings are normally held on the second Saturday of each month, 6.30 PM at the home of John Goulton, 34 Mimosa Ave., Saratoga, (043) 69 3990. Contact Russell Welham (043)92 4000.

LIVERPOOL

Regular meeting date is the Friday following the TIsHUG Sydney meeting at 7.30 PM. Contact Larry Saunders (02) 644-7377 (home)

*** ALL WELCOME ***

10th OCTOBER 1997

SUTHERLAND

Regular meetings are held on the third Friday of each month at the home of Peter Young, 51 Jannali Avenue, Jannali at 7.30pm. Peter Young.

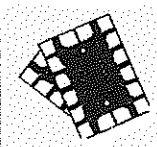
The cut-off date for submitting articles to the Editor for this magazine is the.....

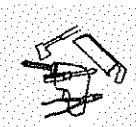
11th OCT FOR THE NOVEMBER MAGAZINE

You can post your letters or disks to TIsHUG C/o 3 Storey St. Ryde 2112 Australia.

Or hand it to the Editor or one of the Club Directors.

TOOL TIME





At Cyril Bohlsen's home the Friday after each TIsHUG Meeting

Tune up your system, Install some new hardware

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